REMARKS

This amendment is a response to the office action mailed April 8, 2004.

The examiner objected to the specification in that "disclosed" is used in the abstract. In response "disclosed" is deleted from the abstract.

The examiner objects to claims 17-18, and 20 in that they contained "and/or". In response the claims are amended by deleting "and/or".

Claims 1, 5, 8-15 and 17-25 are rejected under 35 USC 103(a) as being un-patentable over Gupta et al. US patents No. 6,691,124 further in view of Spinney US patent No. 5,414,704.

In response applicants respectfully disagree with the Examiner and argue for reasons set forth herein the claim as originally filed and amended are patentable over the art of record.

A. The Examiner Erred in Construing Gupta et.al (US patent No. 6,961,124).

It is applicants' contention Gupta et. al does not disclose the structure - including a direct table with at least one entry and a tree structure operatively coupled with said one entry - as recited in applicants claims. Instead Gupta et al discloses and describes a hybrid trie structure including hybrid trie nodes marked as a branch node, leaf search node etc.; figure 1, abstract, column 2, lines 4-16 and col. 3, lines 53-58.

The Examiner argues that the combined Direct Table and Tree Structure element of applicants' claim is disclosed in Gupta et al and particular in the abstract and column 2, lines 4-10. We respectfully disagree with this construction. Applicants have reviewed the reference together with the abstract and column 2 lines 4-10 and could not find any such teaching. In fact, the teaching in Gupta et al including the abstract and column 2, lines 4-10 appears to disclose only a trie structure and does not disclose a direct table in combination with a trie structure as recited in applicants' claim.

B. Because this feature of applicants' claims is not disclosed in any of the cited references including Gupta et al it is applicants' contention that even after the examiner's combination the resulting reference would not render applicants claim obvious in that the above element would be missing from the examiners combination and absent that element the reference does not suggest applicants' claims.

C. Applicants also contend that the data structure of a direct table concatenated to a tree structure when used in apparatus claim of the invention provide a new structure that is not found in the prior art references. Likewise, when used in method claims provide a novel process which is not disclosed in the reference. The benefit from this structure is that a leaf can be accessed in a much shorter time than would be needed to access a leaf in a tree structure, without the Direct Table, as disclosed in Gupta et.al. Stated another way the required information stored in the leaf can be recovered in a much shorter time than the time needed to recover the information in the prior art trie structure. Applicants contend that the novel structure with this benefit is evidence of un-obviousness relative to apparatus claims. Furthermore, applicants argue that the novel process coupled with stated benefits are also evidence of un-obviousness relative to the method claims. As a consequence the claims are patentable over the art record.

D. Improper Combination - No Motivation to Combine.

In addition, to the data structure set forth above applicants claim require the use of a CAM as recited in the claims. The Examiner admits Gupta et al does not teach or suggest the CAM and relies on Spinney et al for that teaching. The Examiner then concludes that it would be obvious for one skilled in the art to combine these two reference to render applicants' claim obvious. The Examiner relied on Spinney, Column 2, lines 65-67 as the basis for the combination. (See page 4, last paragraph of the Office Action, paper No. 6.)

In response applicants contend Spinney, col. 2, lines 65-69 is a statement about Spinney teachings when compared with prior method. Therefore, it would not lead an artisan to form the combination which render applicant's claims obvious. As a consequence none of the references or the Examiner have provided motivation for the combination. In order to combine two references to render claim obvious at least one of the reference must suggest a motivation for the combination. It is applicants' contention that no motivation is described in any of these references. As argued above Gupta et al discloses the use of hybrid trie structure "no direct table or CAM" involved to search whereas Spinney et al uses a CAM and special hash algorithm to search large databases. Both of these references are complete and suggest no motivation or reason to combine. In addition the Examiner has not set forth any logical or concrete reason for the combination. As a consequence the Examiner has not made a prima facie case of obviousness as is required. Therefore, Claims 1, 5, 8-15 and 17 are patentable over the art of record.

E. As argued in C and incorporated herein by reference the apparatus claims and method claims provide novel structure and novel process. Benefits, resulting from

use of the CAM as set forth in the claims, are stated on page 3, lines 17 through page 4, lines 6 (applicants' specification). It is applicants' contention novel structure and/or novel process together with benefits are indicia of un-obviousness. Therefore, the claims are patentable over the art of record.

Claims 2-4, 6-7 and 16 are rejected under 35 USC 103(a) as being un-patentable over Gupta et.al (US patent No. 6,691,124) in view of Spinney (US patent No. 5,417,704) as applied to claims 1, 5, 8-15 and 17-25 above further in view of Weaver (US patent No. 6,173,384).

In response to the Examiners argument that Gupta et.al , Spinney reference are applied to claims 2-4, 6-7 and 16 in the same way that they are applied 1,5,8-15 and 17-25 applicants' contention that argument set forth above in traversing the rejection of claims 1,5,8-15 and 17-25 are equally applicable and incorporated herein by reference.

Regarding the new reference Weaver (US patent No. 6,173,384), it is applicant's contention that this reference does not supply the deficiencies set forth relative to Gupta et.al and Spinney. As a consequence the Weaver reference is merely cumulative and does not render claims 2-4, 6-7, and 16 obvious.

Regarding newly added claims 26-33, applicants contend they are patentable over the art of record for reasons set forth above and incorporated herein by reference.

It is believed the present amendment answered all the issues raised by the Examiner. Reconsideration is hereby requested and an early allowance of the claims is solicited.

Respectfully Submitted,

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